

From the author.

ON SOME STATES WHICH RESEMBLE INFLAMMATION.

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IT is strange that, while the cultivators of medicine are so numerous, and their zeal and assiduity so thoroughly unwearied, it should still be a matter of question whether the art be now in a progressive state. The more general and perhaps the nearly unanimous opinion is, that medicine is advancing with a steady progress to perfection, but, meanwhile, a few names, not undistinguished in science, maintain that there is no real progress, or only progression in the circumference of a circle, that is, constant motion, but, at the same time, constant return to the position formerly occupied. Dr Francis Home, in his Treatise on Croup, published in 1765, observes that "the science of medicine has been gradually advancing for the 2000 years past, and is now brought to a great degree of improvement, perhaps to as great, every circumstance considered, as the difficulty of the art, the limitation of the human faculties, and the continual attempts to further refinement, too often conducted merely by fancy, will admit of." We smile at the boast of Dr Home, and think of the improvements and discoveries since his day; but we are as ready to plume ourselves as he was on the existing state of medicine, and we find nearly his own expressions made use of by writers of the present period. But what are the real facts of the case? Is medicine truly progressive, or is it stationary?

When we think of medical hypotheses, we may very readily adopt the latter opinion. We observe now the same restless search after first principles, and the same disposition to gather these from a few observations, which characterized the more ancient physicians; and even the younger members of the society will recollect opinions started by their zealous inventors as irrefragably certain, which a very few years have first undermined and then demolished. With regard to new diseases, do we not find hints of almost every one in the older authors, and do not the critics of the present day often detect in this way the plagiarism of modern discoverers? If we turn our attention to remedies, we find much to discourage our boastings. Disease appears to be as rife as it was in former days, and our vaunted improvements in the *materia medica* have not made death less frequent than before, have not added to the average duration of human existence. Increased longevity has not yet been attained, and if there be any diminution in the rate

of mortality, it is attributable not to the increased power of medicine, but to those happy arrangements of modern civilized society which have prevented the frequent occurrence of famine and of its usual attendant, pestilence, which have provided for the more perfect clothing of our people, and the greater cleanliness of their dwellings. Chemistry has, indeed, done her best in analyzing and combining various medicinal agents, and every now and then some bright idea, some splendid panacea has been elicited from the laboratory like a spark from its furnace ; but the *currus triumphalis* of the one has been scarcely more lengthened than the blaze of the other. Whether we inquire as to the discovery of what was before unknown, or as to the actual power which medicine now possesses in controlling disease and adding to human happiness, as compared with that of other times, we are hurried into conclusions which tend to nearly universal scepticism.

And yet there must be some fallacy in this reasoning, for our knowledge of the animal structure and of the bodily functions has received large accessions. If we are not better acquainted with the proximate causes of diseases, we are at least much better acquainted with their effects, from the study of morbid anatomy. We possess all the remedies which were known to the ancients, and many new ones of great power have been discovered by the researches of modern observers. The possession of knowledge does, to a certain extent, imply the possession of power : and hence we must necessarily have more power in the cure of disease.

But while it is undeniable that our science has made advances in modern times, yet it appears to me that the principal improvement which has taken place is, that a greater number of practitioners are now masters of the existing knowledge, and hence that a greater number of practitioners are, not discoverers, but intelligent and industrious applicers of the discovered truths, both as to diseases and their remedies. I infer this from the increased means of instruction possessed by the profession, both in the schools and by the extended diffusion of medical literature. Formerly knowledge was more difficult of access, and only the men of original genius or of unusual assiduity could acquire much of it ; but it is now open to men of more ordinary minds and of more common-place habits.

We must never forget, however, a circumstance which influences all our opinions on this matter ; I mean that each practitioner is himself in a state of progression. If he be a man of even common observation, every day is adding to his stock of knowledge ; not only to that which is derived from books, but to that more precious knowledge which is gathered from experience, which each man learns for himself, and which no man can communicate to another. It is this which is daily changing, and at length revolutionizing the mind of each practitioner, and by virtue of which

he differs more from what he was twenty years ago than he does from the practitioner of the bypast century.

There can be no doubt that the difference between the more experienced physician or surgeon and others consists mainly in the correctness of his diagnosis. The application of the remedy to the ascertained disease is comparatively the easier process. It requires, indeed, no great skill to determine that one patient is afflicted with dropsy, that another has palsy, that a third is affected with fever, that a fourth suffers from dyspepsia. But what organic lesion has given rise to the watery swelling, what is the state of the brain indicated by the palsy, how the vital organs are affected in the individual case of fever, whether the dyspepsia be functional merely or organic,—these are questions which, to be answered correctly, call for the enlightened skill of the most accomplished practitioner. Upon the diagnosis will the treatment depend, and that treatment will influence the life, or at least to a great extent, the well-being of the patient. The disease itself may have been ascertained, but the stage at which it has now arrived requires also to be determined: for the treatment which was appropriate at one period may be inert or detrimental in the subsequent progress of the case.

A considerable number of diseases are inflammatory, or at least consist of that congestion of the vessels which frequently passes into the state of inflammation. If we reckon up the various tissues of the body, and recollect that every one of them is susceptible of inflammation, acute, subacute, or chronic, the number of cases occurring in a climate such as ours cannot be matter of wonder. To take only one example. The lungs comprise at least three tissues, the investing membrane, the lining membrane, and the parenchyma intervening. Each of these is liable to inflammation, and hence we have pleuritis, bronchitis, pneumonia. But each of these forms of disease is modified as to activity and duration, besides the peculiar constitution which each individual possesses; and each of these modifications demands its appropriate mode of treatment.

When inflammation occupies any of the external parts of the body, its presence is characterized by the signs of redness, pain, heat, swelling. These are present to a greater or less degree, in every example, and their conjoint existence is necessary to constitute inflammation. When one of the internal organs is affected, as we have no opportunity of using the senses of sight and touch, we infer the existence of inflammation from pain in the affected part, disorder in its function, and the febrile state. These, however, are not infallible signs of inflammation. There are many circumstances which mask the real nature of the disease, and lead away the attention from it to some of its consequences, or to some

accidental symptoms which are connected with it. Again, there are various affections which simulate inflammation, assuming some of its characters, and thus leading to a treatment that is inappropriate. Some of these are more important than others, but in every one of them a correct diagnosis insures a correct treatment. It is my wish to call the attention of the society to some examples of this, and although I have nothing to communicate which is not already known to many of its members, yet the frequency with which errors are committed regarding it, (many of which have been committed by myself,) leads me to believe that the attempt will not be uninstructive.

1. The most obvious example of a diseased state resembling inflammation, and yet calling for a very different treatment, is *chilblain*; and I mention it first, because it is so obvious, and because there is no difference of opinion among surgeons about it. It is always attended by redness, swelling, a tingling pain, and the sensation of heat, even though there is no actual increase of temperature. So far it resembles cutaneous inflammation, but it is never treated as such; and we all know that to detract blood from the part, or to apply the warmth and moisture of an ordinary poultice, would be likely to produce sloughing or unhealthy ulceration. It is treated by stimulants and anodyne applications, and these are found beneficial not only in the primary affection, but in the ulceration which so often succeeds.—In cold weather we often observe an approach to the state of chilblain in the purple-coloured hands and feet of children and invalids. Insane patients are especially liable to it; indeed, with them and many others it is observed in weather when no real chilblains are to be met with. In scrofulous children, in young females with imperfect menstruation, in old victims of intemperance, the purple countenance, hands, and feet, are of common occurrence, and all mark a languor in the capillary circulation which is to be removed, not by local or general depletion, but by the judicious use of a stimulant and nutritive diet. This purple colour of the surface is sometimes designated as a florid complexion; but it is essentially different from a natural bloom, or from healthy plethora (if such a term be admissible,) and generally indicates a state of the body in which great depletion is not well borne.—There may seem to be no great connection between chilblain and erysipelas; but it will be convenient to place under this head some remarks on the latter disease. Many cases of erysipelas are examples of genuine inflammation, having all the characteristics of that state, and passing regularly through its various consequences of effusion, suppuration or gangrene. But there are other cases which in their origin, progress, and termination, are altogether different. They often proceed from mere gastric irritation, (as urticaria usually does,) and are removed as

rapidly as they first appeared, by remedies directed to the digestive organs. The tendency of erysipelas to migrate from one part of the surface to another, or suddenly to be translated to an internal organ, leaving the first seat of attack entirely free from disease, marks it out as somewhat different from common inflammation. And, while energetic treatment is sometimes indispensable to preserve the limb or even the life of the patient, the very common (once the universal) practice of merely covering the affected part with dry flour, indicates very significantly that, in other cases, the do-nothing practice is quite sufficient. The truth is, that under the name of erysipelas we comprehend several affections different from each other, and it is very desirable that they should be distinguished more correctly than they are.

2. *Chronic Rheumatism* has no claim to be called an inflammation, and is rather a consequence of that state ; but it consists of severe pain, and the affected joints are always more or less swelled. It is a very intractable affection, often tiring out the patience of the practitioner, and affording a favourable opportunity for the empiric. Leeching has sometimes been tried, but seldom with any benefit, and the treatment which is most approved consists in counter-irritants, alteratives, the warm bath, and the assiduous application of the hand-cure by shampooing. Acute rheumatism is generally treated in part by blood-letting ; but the rule laid down by authors as to the treatment of internal inflammation, viz. that we are to bleed so long as the buffy coat appears on the blood drawn, is quite inapplicable to his disease. This appearance is shown after every bleeding, and is not less characteristic even when the patient is exhausted to an extreme degree. This circumstance marks out rheumatism as differing from other inflammations ; and the capricious nature of its movements, deserting one joint, which it leaves free from uneasiness, and attacking another which had previously been so ; and then suddenly leaving all the external parts to attack the pericardium, would lead us to hesitate before we adopt the rule of bleeding for effect.

3. *Pleurodyne* is an affection of the muscles covering the sides of the thorax, or of the intercostals. It consists in severe pain increased on inspiration. It is sometimes a mere sprain of those muscles produced by some unusual effort, but often it is the result of cold, is attended with catarrh, and hence there is more difficulty in distinguishing it from pleurisy. The chief means of doing so are that in pleurodyne the pain is more severe, is increased by muscular exertion, and usually abated by pressure, while in pleurisy there is a quickened pulse and other symptoms of febrile action. In pleurodyne the relief afforded by the pressure of the hand, or the support of a bandage or plaster, is astonishing. Some eminent men have considered the state of the pulse as the

best index of the real nature of the case. The second Monro was in the habit of remarking, that whenever he found inward pain along with a quick pulse, he always found blood-letting advantageous. It is certainly a valuable guide, and I lately attended a case which I considered a muscular affection, and treated accordingly; but where the quick pulse suggested another opinion, and the decided relief which followed a full bleeding, rather showed that that opinion was correct. It is possible that in that case the pleuro-dyne did exist, but speedily passed into the pleuritis. The popular opinion, that the lancet affords the appropriate remedy for every "stitch in the side," is so very strong, that it is difficult to refuse the patient's request. No great evil follows the practice when the patient is a stout labouring man; but when a delicate female is the sufferer, she may be materially injured by a full bleeding, and hence it is wise to insist on the more suitable remedies.

4. *Rheumatism of the Abdominal Muscles* often resembles inflammation of the peritoneum, and the diagnosis is of great importance. There is in both tenderness to pressure, (the absence of which characterizes colic;) there is great difficulty of moving, either turning in bed or rising up to the sitting posture; there is often nausea and vomiting, and the grinding uneasiness among the intestines, showing that their functions are in disorder; and there may be constipation tending further to confuse the practitioner. In such a case the diagnosis will be derived mainly from the pulse. In peritonitis the pulse is always accelerated; sometimes it is more wiry in its beat, sometimes more thready; but in the muscular affection the pulse is not necessarily quickened, and when the patient has been quiet for a little while, not disturbed by motion or agitated by alarm as to danger, it will be found nearly natural. Pressure, too, may furnish some assistance to the diagnosis, because while a light pressure may, as in peritonitis, cause severe pain, on the continuance of the pressure, the pain does not increase as it invariably does in that disease, but rather becomes more tolerable, and to such an extent as even to invite its repetition.

Perhaps the very state of mind of the patient may offer a useful hint to the practitioner. It is well known that in peritoneal inflammation there is always severe suffering, but there is frequently a degree of mental calmness which continues even through the whole course of the disease; on the other hand, in many of the cases referred to as simulating that disease, there is hurry, anxiety, impatience, indicative of the nervous or hysterical temperament. That true inflammation may coexist with the hysterical state is undeniable; but in a large number of cases of this kind, the presence of pain will mark, not the genuine, but the simulated disease.

5. *Headach* arising from a disordered stomach is well known to every one. Every one has either felt or observed the acute pain which follows repletion from the ordinary viands of a dinner table, or excess in vinous liquors. But no one could suggest blood-letting as the remedy, although the local pain, the quick pulse, the disordered functions of every part of the system would at first seem to call for its employment. Experience shows us that an emetic, a purgative, a stimulant of another kind, sometimes mere abstinence from food, restores the healthy state of the stomach, and removes all the unpleasant sensations from the head.

Probably there are other cases of pain in the head originating in the same cause, (disordered digestion,) which we are too apt to view as inflammatory in their nature, and as calling for the detraction of blood. The pain in hemicrania, fixed as a nail in one spot of the head, and usually intermittent in its character, is such an instance. It is generally a symptom of deranged digestion, and calls for regulated diet, purgatives, and quinine. It does not call for blood-letting, and although it is sometimes relieved by loss of blood, this is no proof of its being the best treatment. Yet cases do occur not unfrequently in which the severity of the pain, and the immediate relief afforded by leeches, draw away the attention both of the practitioner and patient from the real seat of disease, the stomach and bowels. The perfect recovery which occurs in such cases is to be ascribed more to the native vigour of the system, enabling it to bear with impunity an injury inflicted, or rather to the regulated diet and medicinal remedies which are intended to be used as auxiliaries, but which are in effect the principal agents in the cure.

In cases of this kind there is no imminent danger to life, and, of course, the error in treatment is not seriously prejudicial ; but in *delirium tremens* and in mania, the hazard is much greater. In the former affection pain is not a constant symptom, but it is a frequent one, and whenever the patient's attention is diverted for a little from his imaginary cause of alarm, uneasy sensations in his head are invariably referred to. I need not say that, notwithstanding such symptoms, blood-letting is not the approved remedy ; and that while there are cases in which it is borne without injury, in which perhaps its employment is demanded, in a large majority of instances, remedies of a very different character are found most beneficial. Narcotic stimulants, counter-irritants, and purgatives are used with the best effects ; whereas blood-letting has not unfrequently retarded the recovery, or even hurried on a fatal termination. There is reason to believe that in some cases of suicide, committed under the influence of the alarm or depression attending

delirium tremens, the hemorrhage has proved fatal, although it had proceeded to only a moderate extent.

There are cases of mania to which the same remarks are applicable. Cerebral excitement and vascular turgescence are present to a considerable degree ; there are urgent and alarming symptoms, but there is no real inflammation, and blood-letting is not the appropriate remedy. It requires some fortitude to withhold the lancet in these cases, but the practitioner is well rewarded for his forbearance, by finding a more rapid and more complete recovery. I have no intention to proscribe blood-letting in all cases of mania ; but cases such as I have referred to are of pretty frequent occurrence.

6. But perhaps the *Epidemic Influenza* offers the most striking illustration of the principle which I am insisting on. Ample records have been preserved of this curious disease as it appeared in 1782 and 1803. Since that time we have all had opportunities of observing it in 1833 and 1837. It was a febrile disease with severe local symptoms, lasting for three days, and terminating by profuse perspiration. This description applied not to all but certainly to nine-tenths of the cases observed in Edinburgh. The commencing febrile symptoms were so violent that they seemed to mark an attack of continued fever. The local symptoms, which were most severe on the second day, and which were usually referable to the organs of respiration, seemed to indicate an alarming inflammation of some one of these. They would have called for bleeding under any other circumstances ; but bleeding was scarcely ever had recourse to, and when it was employed, it was not so much for the original disease, as for a modification or sequela of it. With a quick and hard pulse, a hot and dry skin, severe headache and constant cough, nothing would have justified the neglect of blood-letting, but the certainty that it was influenza, and not real bronchitis or pneumonia, and that in a few hours it would pass off under other remedies.

7. *Continued Fever* is perhaps the most important, as being the most extensively fatal of all diseases. I am desirous of making the preceding remarks on other diseases, bear upon it ; but the notice at present must be very short. When we consider that a large proportion of recoveries take place without leaving any morbid sequelæ behind, and that in many of the fatal cases, no disorganization of structure can be detected, it is highly probable that fever differs from inflammation in its pathology. Inflammation leads to morbid degeneration in a large number of cases, and these become apparent, whether recovery takes place, or the termination be fatal. Now, inflammatory symptoms are present in almost every case of fever. Some one organ is peculiarly affected with pain and disturbance of its functions. The symptoms call for watchful

anxiety on the part of the medical attendant, but they do not follow the course taken by idiopathic inflammation, and they yield to remedies of no great efficacy, or, at least, to a much smaller loss of blood than such an inflammation would demand. No one would leave pneumonia to the measures which are unhesitatingly had recourse to in the local affection of fever; and hence, we must infer that the two diseases are different in their nature.

I have now mentioned several forms of disease (and additional examples will perhaps suggest themselves to other members), in which there are symptoms resembling those of inflammation, but which a careful observer will be able to distinguish from them. They indicate, indeed, a different disease or stage of disease; sometimes a merely congested state of the blood-vessels, which may easily pass into inflammation; sometimes a state which is rather a consequence of inflammation; sometimes a local affection entirely *sui generis*; sometimes a congeries of local symptoms not arising from local disease, but symptomatic of disease in a remote part of the body. The resemblance to inflammation is sometimes so great as to perplex and agitate a young practitioner; and the importance of a right diagnosis is so much the greater, because the treatment appropriate to inflammation is prejudicial here. The eagerness with which we bleed in all cases supposed to be inflammatory, the anxiety with which this remedy is even called for by the patients, makes it the more necessary that we should commit no mistake. True it is that the ruddy complexions and robust constitutions of many of the patients, assure us that they will get no harm from the loss of blood, and that possibly it may do them good, at any rate. But these, I think, are only a small portion of the patients who apply to us under such circumstances. A large number are females of irritable and hysterical habits, men whose powers have been debilitated by a course of intemperate indulgence, or half-nourished children of the poor, whose strength is deficient, instead of superabundant. To abstract blood, in any considerable extent, from such patients, will incur the risk not only of allowing the present illness to continue unsubdued, but of leading to organic disease, of bringing on confirmed mania, and even causing premature death.

I am quite aware that the converse of this statement is equally true. Real inflammation is frequently subacute in its attack and insidious in its progress, so that the practitioner is thrown off his guard, and allows the disease to produce irremediable mischief. Many such cases there are, where organic disease has been mistaken for mere functional derangement; where subacute inflammation of the cerebral membranes has been allowed to proceed unchecked to fatal effusion; where pneumonia has been imperfectly recognized, and therefore, imperfectly treated; where peritonitis has

been mistaken for colic. But these examples are just proofs of the necessity of careful observation on the part of the practitioner, and show not only how much caution must be exerted but how much alertness should be manifested with regard to every case which is placed under his care. The routine treatment which is so frequent in the profession, and which the indolence of advancing years is so apt to produce, is generally the consequence of an imperfect education, and of misimprovement of the advantages possessed in youth. The best safeguard is for a young man early to acquire habits of careful observation, of taking nothing for granted, and of seeing every thing with his own eyes ; and while he pays a due regard to the experience, and even to the opinions of his seniors, to observe for himself and to think for himself ; above all, to allow no symptom to pass by unheeded, and to ascertain, so far as he can do, the effect of every remedy which he employs on his patient.